**Postdoctoral researcher position linked to the new African Rainbow Minerals (ARM) Chair in GeoMetallurgy at Stellenbosch University.**

The African Rainbow Minerals (ARM) Chair in GeoMetallurgy, housed at the Department of Earth Sciences and the Department of Process Engineering (Stellenbosch University), invites applications for the position of Postdoctoral researcher in this exciting and inter-disciplinary research field. The minerals industry-sponsored research Chair represents a new research unit at Stellenbosch University that focusses on understanding and modelling ore deposits from their discovery, through mining, to ultimately their beneficiation response. This collaborative research partnership couples geological- and minerals processing skillsets with world-class analytical facilities, all housed at Stellenbosch University. With support from postdoctoral researcher appointees, the research Chair seeks to unlock significant value in the mine-value chain and to become renowned and competitive within both the national- and international research arenas.

The primary focus of the postdoctoral research project will be to derive additional value from low grade manganese resources, including those currently found as tailings material at surface. The researcher is expected to exploit the mineralogical properties of these materials to unlock new product streams using innovate physical, hydrometallurgical and pyrometallurgical flowsheets. Towards this end, postdoctoral researchers will be supported by an array of post graduate student research projects and by the involvement of the two co-Chairs.

The postdoctoral researcher position is currently being offered and it will begin in July 2024 or as soon as possible. Research contracts will be for one year (12 months), with an option for annual renewal up to a maximum of five years (subject to performance and to the year in which Ph.D. was obtained). The fellowship is a tax-free award, and postdoctoral researchers will not be eligible for employee benefits.

**Requirements:** Applicants should hold a Ph.D. degree (obtained within the last five years) in one of the following fields: Geology, Earth Sciences, Chemical Engineering, Extractive Metallurgy, Mining Engineering, Mathematics, Data Science, or a related field. Applicants must have a strong command of the English language. The call is open to international applicants, however, preferences will be given to deserving South African candidates.

**Advantageous attributes include:** 1. A strong background in the geological sciences, 2. experience in using machine learning techniques and geological modelling software; 3. a publication track record of scholarly articles relevant to this position; 4. previous postdoctoral experience or work experience in the minerals sector.

**Duties:** Postdoctoral researchers will be directly involved in developing optimized geometallurgical models and workflows for the minerals sector. Research foci include both theoretical and applied components of this field, and there will be strong emphasis on data management protocols and integration of emerging technologies. Postdoctoral researchers will also be expected to assist with post-graduate student management, teaching of geometallurgy-, geology- and chemical engineering-related subject matter, and preparation of funding proposals (for which the postdoctoral researcher may be the PI). Postdoctoral researchers are expected to produce at least two scholarly articles per year.

**How to apply:** Applicants must submit a single .pdf document, comprising a cover/motivation letter, a comprehensive CV (including publication list) and the names and contact details of three contactable professional references. Applications should be emailed to Dr Bjorn von der Heyden (bvon@sun.ac.za) by **15 June 2024**. For more information related to the positions, please contact Dr von der Heyden via email.